

REMARKS

The present application includes pending claims 1-19. By this Amendment, claims 1-3, 7, 13-14, and 19 have been amended. It is respectfully submitted that the pending claims define allowable subject matter.

The drawings were objected to because reference character “18” was used to designate two different objects in Figures 1 and 2. The Applicant has attached a “Replacement Sheet” of amended drawings. The drawings have been amended to show that reference numeral 18 in Figure 2 refers to the patient, just as in Figure 1.

The drawings were also objected to because Figure 2 includes “OR” and “SOR.” The Applicants submit that “OR” refers to “Overlap Region,” while “SOR” refers to “Source Only Region.” Nevertheless, the Applicant has amended Figure 2 to delete “OR” and “SOR” to avoid any confusion.

Claims 2, 3, and 7 were objected to because of minor drafting errors. Claims 2, 3 and 7 have been amended as set forth above to correct these typographical errors.

Claims 13, 14, and 19 were objected to due to inconsistent preambles. The Applicant has accordingly amended these claims to correct these typographical errors.

Claims 1-4, 6-9, 11-13, 15-17, and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 4,610,021 (“Peschmann ‘021”) in view of United States Patent No. 5,442,673 (“Rand”). Claims 5, 10, 14, and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Peschmann ‘021 in view of Rand and United States Patent No. 4,531,226 (“Peschmann ‘226”). The Applicant respectfully traverses these rejections for the reasons set forth hereafter.

The Applicant first turns to the rejection of claims 1-4, 6-9, 11-13, and 19 as being unpatentable over Peschmann '021 in view of Rand. Peschmann '021 relates generally to “a high speed multiple section computed-tomographic (CT) medical scanning system, and more particularly... to an X-ray beam collimation structure.” See Peschmann '021 at Column 1, lines 5-8. Figure 5 of Peschmann '021 “is a perspective view of the source collimator *rings* with support means.” See Peschmann '021 at Column 4, lines 21-23 (emphasis added). “In this embodiment three fixed collimator rings 72, 74 and 76 are provided and one movable ring 78 is provided.” See *id.* at Column 4, lines 23-26. As shown in Peschmann '021, multiple collimators are used.

However, Peschmann '021 does not teach, nor suggest, a single collimator having “first and second sets of apertures aligned to collimate an x-ray fan beam into a first collimated beam having a first width and a second collimated beam having a second width, respectively,” as recited, for example, in amended claim 1 of the present application. Instead, in order to achieve beams of different width, Peschmann '021 uses multiple collimators and “by moving the detector array housing (which acts as a collimator) and the movable collimator ring towards each other, the fan beam defined therebetween is reduced in thickness and position.” See *id.* at Column 4, lines 27-31. Peschmann '021 is similar to the systems described in the Background section of the present application, which states, in part, “[I]n order to collimate the x-ray fan beam at different widths, *multiple* collimators having different sized apertures were typically needed, thereby increasing the cost of the system.” See App. No. 10/064,182 at paragraph [04] (emphasis added).

As stated above, however, Peschmann '021 does not teach, nor suggest, a single collimator having a plurality of apertures aligned to collimate an x-ray fan beam into a plurality of beams having varying widths. The Applicant respectfully submits that the combination of Peschmann '021 and Rand does not teach, nor suggest, a single collimator having "first and second sets of apertures aligned to collimate an x-ray fan beam into a first collimated beam having a first width and a second collimated beam having a second width, respectively." Thus, for at least this reason, claims 1-19 are not unpatentable over Peschmann '021 and Rand, and should therefore be in condition for allowance.

Additionally, the system of Peschmann '021 may scan various levels, but in order to do so, a plurality of target rings are employed.

With such an arrangement, by running the electron beam subsequently on *all four target rings* and by measuring the attenuated radiation with a double ring of detectors, 8 levels can be scanned without moving the object/patient.

See Peschmann '021, Column 2, lines 3-7 (emphasis added). In particular, FIG. 3 shows the multiple section configuration where eight sections are being obtained by serial scanning of the *four target rings* in combination with the dual section detector ring 14.

See Peschmann '021 at Column 3, lines 43-46. Thus, the Applicants respectfully submit that Peschmann '021 does not teach, nor suggest, a "collimator being moved between first and second positions with respect to said single target ring to define said first and second collimated beams having said first and second widths, respectively," as recited in claim 7 of the present application. Instead, as discussed above, in order to scan sections at different width, a plurality of target rings are employed. Figure 3 of Peschmann '021,

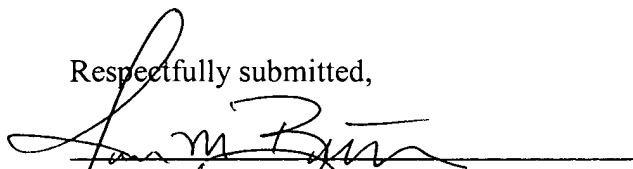
in particular, shows the use of multiple target rings to achieve different widths. The Applicant respectfully submits that the combination of Peschmann '021 and Rand does not teach, nor suggest, a "collimator being moved between first and second positions with respect to said single target ring to define said first and second collimated beams having said first and second widths, respectively," as recited in claim 7. For at least this reason, claims 7-11 are not unpatentable over Peschmann '021 and Rand.

The Applicant now turns to the rejection of claims 5, 10, 14, and 18 as being unpatentable over Peschmann '021 in view of Rand and Peschmann '226. For at least the reasons discussed above, the Applicant respectfully submits that claims 5, 10, 14, and 18 are not unpatentable over these references, and should therefore be in condition for allowance.

The Applicant respectfully submits that claims 1-19 should be in condition for allowance for at least the reasons discussed above. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited to contact the Applicant. The Commissioner is authorized to charge any necessary fees or credit any overpayment to the to the Account No. 07-0845.

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Respectfully submitted,



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REPLACEMENT SHEET

1/4



FIG. 1

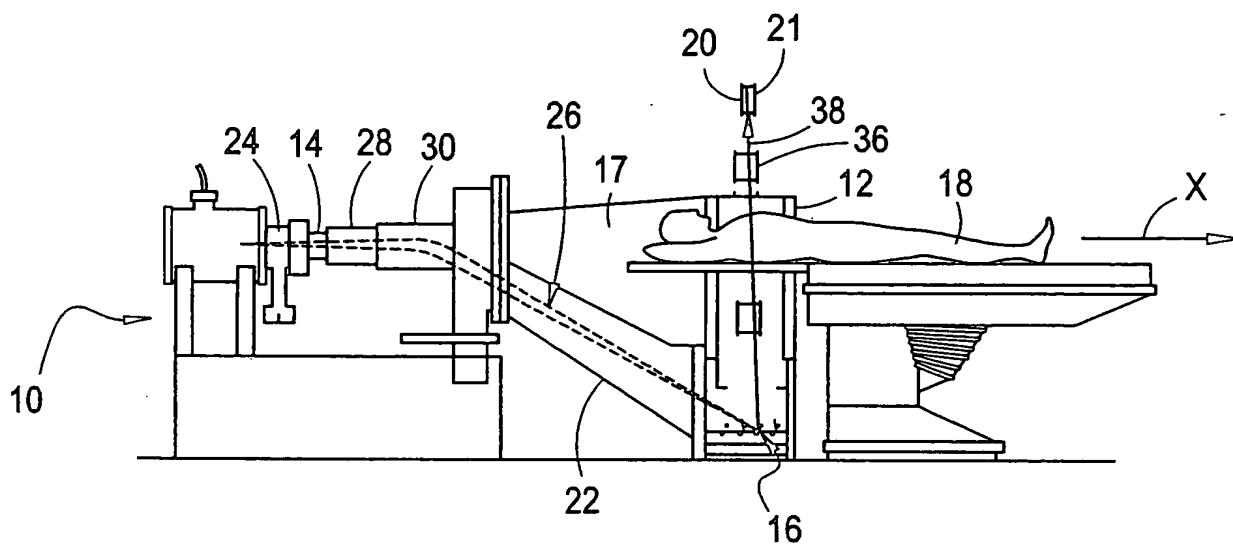


FIG. 2

